Toward a More Inclusive NAEP: Students with Disabilities and English Language Learners

It is important to assess all students selected in the randomized sampling process, including students with disabilities (SD) and students who are classified by their schools as English language learners (ELL). Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. School personnel, guided by the student's Individualized Education Program (IEP), as well as eligibility for Section 504 services, make decisions regarding inclusion of students with disabilities in the assessment. They also make decisions regarding inclusion of English language learners, based on NAEP's guidelines, by evaluating the student's capability of participating in the assessment given the available accommodations, and taking into consideration the number of years the student has been receiving instruction in English. The results displayed in this report and in other publications of the NAEP 2005 mathematics results are based on representative samples that include SD and ELL students who were assessed either with or without accommodations, based on NAEP's guidelines.

Percentages of students excluded from NAEP may vary considerably across states, and, within a state, across years. Comparisons of results across states and within a state across years should be interpreted with caution if the exclusion rates vary widely. The percentages of assessed students classified as SD or ELL, as well as their NAEP performance in each participating state and jurisdiction, are available in an interactive database at the NAEP website (http://nces.ed.gov/nationsreportcard/).

Prior to 2000, no testing accommodations were made available to the samples of students with disabilities and the English language learners in state NAEP mathematics assessments that served as the basis for reported results. In the 1996 national and 2000 national and state mathematics assessments, NAEP researchers drew a second representative sample of schools. Accommodations were made available for students in this sample who required them, provided the accommodation did not change the nature of what was tested. For example, students could be assessed one-on-one or in small groups, receive extended time, or use a large-print test book. In mathematics, students had the option of having the test questions read aloud in English, or using a bilingual English-Spanish test book. However, in the mathematics assessment, students were not allowed to use calculators for any questions on which calculators were not permitted. NAEP has used these comparable samples to study the effects of allowing accommodations for students categorized as SD or ELL in the assessments. A series of technical research papers covering various NAEP subject areas has been published with the results of these comparisons (see http://nces.ed.gov/nationsreportcard/about/inclusion.asp #research).

Tables 1–A and 1–B display the percentages of students with disabilities and English language learners in Idaho identified, excluded, and assessed under standard and accommodated conditions at grades 4 and 8.

Tables 2–A and 2–B show the percentage of students assessed in Idaho by disability status and their performance on the NAEP assessment in terms of average scale scores and percentages performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8.

Tables 3–A and 3–B present the percentage of students assessed in Idaho by ELL status, their average scale scores, and their performance in terms of the percentage below *Basic*, the percentages at or above *Basic*, at or above *Proficient*, and at *Advanced*.

Table 4 presents the total number of students assessed, the percentage of students sampled who were excluded, and average scale scores for all participating states and other jurisdictions.

Table 1-A

The Nation's Report Card 2005 State Assessment

Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, grade 4 public schools: various years, 2000–2005

Year and testing status		SD and/or ELL		SD		ELL	
		Idaho	Nation	Idaho	Nation	Idaho	Nation
1992[1]	Identified	9	10	8	7	2	3
	Excluded	3	7	3	5	1	2
	Assessed under standard conditions	6	4	5	3	1	1
2000	Identified	16	19	12	13	5	7
	Excluded	2	4	1	3	2	1
	Assessed under standard conditions	7	10	5	5	3	5
	Assessed with accommodations	7	5	6	4	1	1
2003	Identified	18	22	12	14	7	11
	Excluded	2	4	1	3	1	1
	Assessed under standard conditions	9	10	4	4	5	7
	Assessed with accommodations	7	8	7	7	2	2
2005	Identified	18	23	11	14	8	10
	Excluded	1	3	1	3	1	1
	Assessed under standard conditions	9	10	3	4	6	7
	Assessed with accommodations	8	10	7	8	2	3

[1] Accommodations were not permitted for this assessment.

NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding. Some students were identified as both SD and ELL. Such students would be included in both the SD and ELL portions of the table.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Table 1-B

The Nation's Report Card 2005 State Assessment

Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, grade 8 public schools: various years, 2000–2005

Year and testing status		SD and/or ELL		SD		ELL	
		Idaho	Nation	Idaho	Nation	Idaho	Nation
1990[1]	Identified	6	—	6	—	1	—
	Excluded	2	—	2	—	#	—
	Assessed under standard conditions	4	—	4	—	#	—
1992[1]	Identified	7	10	7	8	1	2
	Excluded	3	6	3	5	#	2
	Assessed under standard conditions	4	4	4	3	#	1
2000	Identified	14	14	11	11	4	4
	Excluded	2	4	2	3	1	1
	Assessed under standard conditions	8	7	6	5	3	3
	Assessed with accommodations	4	3	3	2	1	1
2003	Identified	15	19	10	14	6	6
	Excluded	1	4	1	3	#	1
	Assessed under standard conditions	9	8	6	5	4	4
	Assessed with accommodations	5	7	4	6	1	1
2005	Identified	17	19	12	13	6	6
	Excluded	2	4	2	3	1	1
	Assessed under standard conditions	8	7	4	3	4	4
	Assessed with accommodations	7	8	6	7	2	1

[1] Accommodations were not permitted for this assessment.
— Not available.
Estimate rounds to zero.
NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding. Some students were identified as both SD and ELL. Such students would be included in both the SD and ELL portions of the table.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Table 2-A

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by students' disability status, grade 4 public schools: various years, 2000–2005

Student disability status	Percent of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Yes						
2000[1]						
Nation (public)	‡	‡	‡	‡	‡	‡
Idaho	‡	‡	‡	‡	‡	‡
2000						
Nation (public)	10*	198*	71*	29*	6*	1
Idaho	11	186*	83*	17*	#	#
2003						
Nation (public)	11*	214*	50*	50*	12*	1*
Idaho	11	208*	59*	41*	7	#
2005						
Nation (public)	12	218	44	56	16	2
Idaho	10	215	47	53	10	1
No						
2000[1]						
Nation (public)	‡	‡	‡	‡	‡	‡
Idaho	‡	‡	‡	‡	‡	‡
2000						
Nation (public)	90*	227*	33*	67*	24*	3*
Idaho	89	229*	26*	74*	22*	1*
2003						
Nation (public)	89*	236*	21*	79*	34*	4*
Idaho	89	238*	16*	84*	33*	3*
2005						
Nation (public)	88	240	17	83	38	5
Idaho	90	245	10	90	44	5

Estimate rounds to zero.
‡ Reporting standards are not met.
* Value is significantly different from the value for the same jurisdiction in 2005.
[1] Accommodations were not permitted for this assessment.
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 mathematics Assessments.

Table 2-B

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by students' disability status, grade 8 public schools: various years, 2000–2005

Student disability status	Percent of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Yes						
2000[1]						
Nation (public)	‡	‡	‡	‡	‡	‡
Idaho	‡	‡	‡	‡	‡	‡
2000						
Nation (public)	8*	229*	80*	20*	4*	#
Idaho	9	230*	83	17	1	#
2003						
Nation (public)	11*	242*	71*	29*	6	1
Idaho	10	241	75	25	5	#
2005						
Nation (public)	11	244	69	31	7	1
Idaho	10	242	73	27	3	1
No						
2000[1]						
Nation (public)	‡	‡	‡	‡	‡	‡
Idaho	‡	‡	‡	‡	‡	‡
2000						
Nation (public)	92*	275*	35*	65*	26*	5*
Idaho	91	282*	24	76	29*	4
2003						
Nation (public)	89*	280*	29	71	30*	5*
Idaho	90	284	22	78	31	5
2005						
Nation (public)	89	281	28	72	31	6
Idaho	90	285	21	79	33	5

Estimate rounds to zero.
‡ Reporting standards are not met.
* Value is significantly different from the value for the same jurisdiction in 2005.
[1] Accommodations were not permitted for this assessment.
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 mathematics Assessments.

Table 3-A

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), grade 4 public schools: various years, 2000–2005

ELL status		Percent of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Yes							
2000[1]							
	Nation (public)	‡	‡	‡	‡	‡	‡
	Idaho	‡	‡	‡	‡	‡	‡
2000							
	Nation (public)	6*	199*	70*	30*	4*	#
	Idaho	4*	‡	‡	‡	‡	‡
2003							
	Nation (public)	9	214*	51*	49*	9*	#*
	Idaho	6	211*	56*	44*	7	#
2005							
	Nation (public)	10	216	46	54	11	1
	Idaho	8	221	37	63	10	#
No							
2000[1]							
	Nation (public)	‡	‡	‡	‡	‡	‡
	Idaho	‡	‡	‡	‡	‡	‡
2000							
	Nation (public)	94*	226*	34*	66*	24*	3*
	Idaho	96*	226*	31*	69*	20*	1*
2003							
	Nation (public)	91	236*	21*	79*	34*	4*
	Idaho	94	237*	18*	82*	32*	2*
2005							
	Nation (public)	90	239	18	82	38	5
	Idaho	92	243	12	88	43	5

Estimate rounds to zero.
‡ Reporting standards are not met.
* Value is significantly different from the value for the same jurisdiction in 2005.
[1] Accommodations were not permitted for this assessment.
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 213 or lower; Basic, 214–248; Proficient, 249–281; and Advanced, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 mathematics Assessments.

Table 3-B

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), grade 8 public schools: various years, 2000–2005

ELL status		Percent of students	Average scale score	Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Yes							
2000[1]							
	Nation (public)	‡	‡	‡	‡	‡	‡
	Idaho	‡	‡	‡	‡	‡	‡
2000							
	Nation (public)	3*	234*	80*	20*	2*	#
	Idaho	4	‡	‡	‡	‡	‡
2003							
	Nation (public)	5	241*	74	26	5	1
	Idaho	5	241*	74*	26*	3	#
2005							
	Nation (public)	6	244	71	29	6	1
	Idaho	6	254	58	42	7	#
No							
2000[1]							
	Nation (public)	‡	‡	‡	‡	‡	‡
	Idaho	‡	‡	‡	‡	‡	‡
2000							
	Nation (public)	97*	273*	37*	63*	26*	5*
	Idaho	96	279*	28*	72*	27*	4
2003							
	Nation (public)	95	278*	31*	69*	29*	5*
	Idaho	95	282	25	75	30	5
2005							
	Nation (public)	94	280	30	70	30	6
	Idaho	94	283	25	75	31	5

Estimate rounds to zero.
‡ Reporting standards are not met.
* Value is significantly different from the value for the same jurisdiction in 2005.
[1] Accommodations were not permitted for this assessment.
NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses. Achievement levels correspond to the following points on the NAEP mathematics scale: below Basic, 261 or lower; Basic, 262–298; Proficient, 299–332; and Advanced, 333 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 mathematics Assessments.

Table 4

The Nation's Report Card 2005 State Assessment

Total number of students assessed, percentage of students sampled who were excluded, and average mathematics scale scores, grades 4 and 8 public schools: By state, 2005

State	Grade 4			Grade 8		
	Number assessed	Percentage excluded	Average scale score	Number assessed	Percentage excluded	Average scale score
Alabama	2,600	1	225	2,300	1	262
Alaska	2,800	2	236	2,600	2	279
Arizona	2,900	4	230	2,800	5	274
Arkansas	2,800	3	236	2,700	3	272
California	10,700	4	230	9,800	2	269
Colorado	2,800	3	239	2,400	3	281
Connecticut	2,800	2	242	2,700	3	281
Delaware	2,500	8	240	2,500	11	281
Florida	4,300	3	239	3,900	3	274
Georgia	4,300	2	234	3,900	2	272
Hawaii	2,700	3	230	2,700	3	266
Idaho	2,900	1	242	2,900	2	281
Illinois	4,100	3	233	4,000	3	278
Indiana	2,700	2	240	2,700	4	282
Iowa	3,200	2	240	2,700	3	284
Kansas	3,300	3	246	2,700	4	284
Kentucky	2,800	3	231	2,800	3	274
Louisiana	2,700	4	230	2,300	4	268
Maine	2,600	4	241	2,500	5	281
Maryland	2,700	4	238	2,600	4	278
Massachusetts	3,900	4	247	3,500	6	292
Michigan	2,500	4	238	2,400	4	277
Minnesota	2,600	2	246	2,600	2	290
Mississippi	2,800	2	227	2,700	3	262
Missouri	2,800	2	235	2,700	4	276
Montana	2,700	2	241	2,700	2	286
Nebraska	3,100	2	238	2,800	1	284
Nevada	2,900	3	230	2,700	2	270
New Hampshire	2,600	2	246	2,400	2	285
New Jersey	2,800	3	244	2,600	4	284
New Mexico	2,800	3	224	2,700	3	263
New York	5,000	4	238	4,300	4	280
North Carolina	4,100	2	241	3,900	3	282
North Dakota	2,200	3	243	2,400	4	287
Ohio	3,500	3	242	3,300	6	283
Oklahoma	2,700	4	234	2,500	4	271
Oregon	2,700	4	238	2,500	3	282
Pennsylvania	3,500	3	241	2,800	3	281
Rhode Island	2,700	3	233	2,800	3	272
South Carolina	2,800	4	238	2,600	6	281
South Dakota	2,800	2	242	2,800	2	287
Tennessee	2,900	3	232	2,400	5	271
Texas	8,400	6	242	7,900	6	281
Utah	2,900	2	239	2,800	2	279
Vermont	2,100	3	244	2,300	4	287
Virginia	2,700	5	240	2,600	5	284
Washington	2,800	3	242	2,700	2	285
West Virginia	2,700	2	231	2,600	3	269
Wisconsin	2,600	2	241	2,500	4	285
Wyoming	1,800	2	243	2,000	2	282

NOTE: The NAEP mathematics scale ranges from 0 to 500. Sample sizes are rounded to the nearest hundred, or indicated as <50 when the value is between 1 and 49.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.